
XANADU CORE CONCEPTS

Theodor Holm Nelson

Xanadu On-Line Publishing

3020 Bridgeway #295

Sausalito CA 94965

Tel. 415/ 331-4422 Fax 415/ 332-0136

© 1993 Xanadu On-Line Publishing. "Xanadu" is a trademark of Xanadu On-Line Publishing.

At this time of Internet and Interactive Multimedia, is the Xanadu concept outmoded? What is it, anyway?

Xanadu is an idealistic and highly-detailed paradigm for a new electronic literature. With its strong moral precepts Xanadu verges on a religion.

THE MULTIMEDIA CONNECTION PROBLEM

Xanadu is an opposite standard for multimedia, opposite to what most companies in the field are doing. Current "multimedia standards" are built on a closed-unit philosophy-- multimedia objects are closed encapsulations that do not allow interconnection between documents. This is a dead-end world.

Xanadu structure is built for OPEN HYPERMEDIA PUBLISHING, allowing free interconnection among documents. Every author of a new document is free to connect to previous documents, including quotation without prearrangement or advance payment.

GARDEN, PLAYING FIELD, LANDSCAPE

A good way to think of Xanadu is an enchanted garden where everyone is free to quote and interconnect. Or as a fair playing field for controversy, in which everyone may comment on everyone else's ideas in a way that is clearly sorted out where no one has an advantage.

Or as a shared landscape of data that is equally accessible to all viewing systems, not locked to any particular machine or viewing software.

DESIGN DETAILS AND SACRIFICES

We have tried to figure out the best, most usable system for delivery and ownership. Not everything you might want is in it; but having a simple, clean design is paramount, and we believe it is a simple, clean design.

THE LITERARY POINT OF VIEW

A document is a prepared information package with a point of view; literature is a system of interconnected documents. But until now the interconnections could not be implemented explicitly.

A document is an immersive place, like a swimming pool. You immerse yourself in the author's point of view. It is important to be able to get at separate pieces of the document without context; it is also important to be able to get at the context of every piece.

After all else, literature is what remains.

THE NONLITERARY VIEW: "FACTS"

Technical people tend to think we just want facts. But facts are fewer than you might think; context and viewpoint are necessary. This is the literary point of view.

THE RIGHTS PROBLEM

Pragmatically, it is necessary to create a system that will entice rightsholders.

Therefore it is necessary to have royalty on the delivered document. There are incentives to keep this royalty small.

Our system invites publishers to agree to certain principles within the Xanadu system, but in no way changes their rights outside the Xanadu publishing universe. (It does slightly reduce the publisher's control of the material, but guarantees full royalty on every delivery.)

THE MODEL OF OWNERSHIP AND PUBLICATION

All relationships transpose from paper publishing: an author is still an author, a publisher is still a publisher (with initiative, rights and responsibilities), and a service provider now replaces the printer and distributor.

A document is a prepared information package with a point of view. A document is owned by an author when private, owned by a publisher when published (since a publisher is the legal entity that takes responsibility for the contents-- not an artistic concept but a legal one).

The publisher volunteers to put documents (objects) on the system; the publisher acknowledges responsibility for the contents (responsibility which is legally present in paper publishing, whether people know it or not).

The publisher places a document in the charge of a service provider. The document's contents are sent for by a user.

Publishers pay for storage, users pay for delivery.

There is no royalty to the choosing publisher for links or transclusions; royalty is paid on the contents when a user brings them in.

There can be no distinction between "just looking" at a document and saving it, since anyone with a modem can save whatever is

sent. Therefore the user must be free to keep a copy of what has been looked at, and prices must be low.

CONTRACT

All parties (author, publisher, service provider, user) must agree to this model, which is based on copyright but goes beyond the existing copyright arrangements.

THE DOCUMENT MODEL

A document consists of content bytes and connections. The connections are of two types: links (typed connectors between content bytes) and transclusions (virtual quotations by pointer, to be brought in at the time of delivery from the original).

A document may quote any other document without permission, since the quotations are just pointers. The document which quotes is not making a copy; the USER is making a copy by drawing out the material.

DELIVERY

The user sends for content bytes (perhaps implicitly, by pointing and clicking). They are sent for by the user's screen machine.

A virtual document with transclusions is assembled in the user's screen machine-- rather the way that a larger file is assembled on the Internet out of packets.

FREEDOM

People should be free to read anything. Xanadu creates a point-and-click universe with user freedom.

Moral precept: all hypertext jumps should be reversible. Many authors like to imprison the reader. We believe the reader must always be free to go back, turn the page or fast-forward.

Moral precept: the system must not keep records of who sends for what; otherwise reading becomes a political act.

Moral precept: we should be free to jump into a document at any place, and use it according to our own preferences.

EXPLAINING IT QUICKLY

When you are trying to explain Xanadu quickly, a good sequence is this:

1. Xanadu is a system for the network sale of documents with automatic royalty on every byte.
2. The transclusion feature allows quotation of fragments of any size, with automatic royalty to the original publisher.
3. This is an implementation of a connected literature.
4. It is a system for a point-and-click universe.